

Notice of Allowability

Application No.

09/988,540

Examiner

Alonzo Chambliss

Applicant(s)

LANG, THOMAS

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment A filed on 5/19/03 and amendment B filed on 9/29/03.
2. ☒ The allowed claim(s) is/are 7-14.
3. ☒ The drawings filed on 10 September 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>10</u> . |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____. | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

1. Amendment A filed on 5/19/03 in Paper No. 8 and amendment B filed on 9/29/03 in Paper No. 9 have been fully considered.

Drawings

2. The formal drawings filed on 5/19/03 in Paper No. 9 have been approved by the examiner.

Allowable Subject Matter

3. The following is a statement of reasons for the indication of allowance subject matter: the prior art of record does not teach or suggest the combination of a number of chips located between a base plate and a cover plate, wherein the faces of the base plate and of the cover plate that face away from the chips are each electrically isolated from the chip. The base plate includes a insulating substrate and a first metal coating on the electrically insulating substrate, wherein the first metal coating forms the inner face of the base plate facing towards the chips. A first contact spring arranged between the upper face of each chip and the cover plate and a second spring located between the cover plate and the base plate. The pressure on the cover plate establishes an electrical contact between the second spring and the first metal coating in claim 7.

A substrate with a plurality of bond fingers offset from the center of the substrate and surrounding a die area. A first lower die having a first, inner, and second row of bonding pads, wherein the first row of pads are electrically coupled to bond fingers by

lower bond wires. A second lower die is coupled to a first subset of bond fingers of the plurality of bond fingers while the first lower die is coupled to bond fingers with lower bond wires. A first stacked die coupled to the first lower die, wherein the first stacked die has a first subset of pads coupled to inner pads by wires and a second subset of pads coupled to a subset of the plurality of bond fingers. A second stacked die coupled to the second lower die, wherein the second stacked die is coupled to the first lower die with bridge bond wires that span the lower bond wires and coupled the plurality of second stacked die bond pads to the plurality of second row of pads in claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning the communication or earlier communications from the examiner should be directed to Alonzo Chambliss whose telephone number is (703) 306-9143. The fax phone number for the Group is (703) 308-772 or 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-7956.

AC/August 21, 2003


Alonzo Chambliss
Patent Examiner
Art Unit 2827